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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/773.068 ELMER, STEVE Office Action Summary Art Unit Examiner CHARLES D. ADAMS 2164 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 11 March 2008. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-3.7-13.17-23 and 27-30 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-3, 7-13, 17-23, and 27-30 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date.

Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date \_

5) Notice of Informal Patent Application

6) Other:



Application No.

Page 2

Application/Control Number: 10/773,068

Art Unit: 2164

### DETAILED ACTION

#### Remarks

 In response to communications filed on 11 March 2008, claims 1, 11, and 21 are amended. Claims 1-3, 7-13, 17-23, and 27-30 are pending in the application.

#### Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 11-13 and 17-20 are rejected under 35 U.S.C. 101 because the claims lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. Though they are directed towards an apparatus, there is no hardware recited in the claims. They are clearly not a series of steps or acts to be a process nor are they a combination of chemical compounds to be a composition of matter. As such, they fail to fall within a statutory category. They are, at best, functional descriptive material per se.

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive

Art Unit: 2164

material to be realized. Compare *In re Lawry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994).

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored on a computer-readable medium, in a computer, or on an electromagnetic carrier signal, does not make is statutory. See *Diehr*, 450 U.S. at 185-186, 209 USPQ at 8 (noting that the claims for an algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer.").

#### Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- Claims 1-3, 11-13, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Glerum et al.</u> (US Patent 6,6529,267) in view of <u>Marullo et al.</u> (US Patent 6,185,701), and further in view of <u>Dutta et al.</u> (US Patent 6,918,066), and further in view of <u>Miller et al.</u> (US Pre-Grant Publication 2007/0234217).

As to claim 1, <u>Glerum et al.</u> teaches a method of testing browser software in a computer environment (see Abstract and 1:38-57), the method comprising the steps of:

Application/Control Number: 10/773,068
Art Unit: 2164

Glerum et al. does not teach generating a list of URLs (Universal Resource Location) using a web crawler:

Marullo et al. teaches generating a list of URLs (Universal Resource Location) using a web crawler (see 13:62-14:14).

Glerum et al. as modified teaches applying a browser test (see Marullo et al. 8:22-45), wherein said browser test script automatically instructs a first browser program containing said browser software to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs (see Marullo et al. 8:22-45);

Detecting one or more errors in rendering of said first browser program using the web pages (see <u>Glerum et al.</u> 1:38-57 and 4:63-5:3)

Glerum et al. as modified does not teach by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program

<u>Dutta et al.</u> teaches by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program (see 7:23-35 and 7:50-65), wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program (see 7:50-65. The scorecard evaluates how well the various browsers displayed a page based on an internal representation of how the page was displayed,

Art Unit: 2164

"this scorecard compares the web site as it is displayed on each browser to a standard set of criteria that includes accessibility of the web site, the percentage of the content of the web site displayed by each browser, the load time of the web site on each browser, and the compatibility of scripts of the web site across different browsers")

Glerum et al. as modified does not explicitly teach wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page;

Miller et al. teaches wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page (see paragraphs [0024], [0082]-[0083], and [0088]-[0094]. The user can select images, text, and tables. Objects will be stored identifying these items along with their attributes in a script. Upon playback, if the information in the script does not match the internal representation of the webpage an error results(see paragraph [0024]));

## Glerum et al. as modified teaches:

and wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation of rendering results of the second browser program (see <u>Dutta et al.</u> 8:9-11, 8:41-55, and 8:65-9:14 and <u>Miller et al.</u> paragraphs [0024], [0089], [0091], and [0093]); and

Art Unit: 2164

Automatically storing information about said one or more errors (see <u>Glenrum et al.</u> 4:63-5:3);

Wherein said step of applying a browser test script is performed while said first browser program is under development and prior to distribution (see <u>Glerum et al.</u> 4:63-5:3 and 8:61-9:3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Glerum et al.</u> by the teaching of <u>Marullo et al.</u>, since <u>Marullo et al.</u> teaches that "by providing for the aforementioned automated client-based web universal resource (link) extraction tool, such automation avoids the inadequacies associated with user testing and intervention wherein manual users might otherwise be required to request pages, view document source, and document all of the links (assuming they were found without error) associated with the HTML pages. The getlinks subsystem accordingly automatically finds all links on each page, and moreover formats the output data for use by the other test tools" (see 14:32-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified <u>Glerum et al</u>. by the teaching of <u>Dutta et al</u>., since <u>Dutta et al</u>. teaches that "In addition to testing the web site on the various browsers to determine the effectiveness of each browser, it is also desirable to have a technique that can compare each browser's execution of the web site to a set of criteria established by the web designed" (see 3:15-20).

It would also have been obvious to have further modified <u>Glerum et al</u>. by the teachings of <u>Miller et al.</u>, as <u>Miller et al</u>. is also related to testing browser software to

Art Unit: 2164

determine its usability and whether or not it can correctly render webpages. In addition to this, Miller et al. teaches "broadly speaking, the invention relates to improved approaches for testing websites. According to one aspect of the invention website testing is performed in a browser environment. As such, information for testing can be obtained from a browser that is able to perform automated analysis and testing of websites" (see paragraph [0010]).

As to claim 11, <u>Glerum et al</u>. teaches an apparatus of testing browser software in a computer environment (see Abstract and 1:38-57), comprising:

A plurality of software modules (see Abstract and 1:38-57), said plurality of software modules including:

Glerum et al. does not teach a module for generating a list of URLs (Universal Resource Location) using a web crawler;

<u>Marullo et al.</u> teaches a module for generating a list of URLs (Universal Resource Location) using a web crawler (see 13:62-14:14);

Glerum et al. as modified teaches a browser test script module (see Marullo et al. 8:22-45), wherein said browser test script module automatically instructs a first browser program containing said browser software to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs (see Marullo et al. 8:22-45);

Art Unit: 2164

A module for detecting one or more errors in rendering of said first browser program using the web pages (see Glerum et al. 1:38-57 and 4:63-5:3)

Glerum et al. as modified does not teach by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program

<u>Dutta et al.</u> teaches by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program (see 7:23-35 and 7:50-65) wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program (see 8:9-11, 8:41-55, and 8:65-9:14)

Glerum et al. as modified does not teach wherein the internal representation includes a list of objects to be displayed for the web pages and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the webpage

Miller et al. teaches wherein the internal representation includes a list of objects to be displayed for the web pages and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the webpage (see paragraphs [0024], [0082]-[0083], and [0088]-[0094]); and

Application/Control Number: 10/773,068
Art Unit: 2164

## Glerum et al. as modified teaches:

wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation of rendering results of the second browser program (see <u>Dutta et al.</u> 8:9-11, 8:41-55, and 8:65-9:14 and <u>Millier et al.</u> paragraph (0024))

A module for automatically storing information about said one or more errors (see <u>Glerum et al.</u> 4:63-5:3);

Said apparatus further comprising at least one computer, wherein said plurality of software modules are executed on said at least one computer (see <u>Glerum et al.</u>

Abstract, 1:38-57, and 3:36-58)

Wherein said first browser program is under development prior to distribution of said browser program (see <u>Glerum et al.</u> 4:63-5:3 and 8:61-9:3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Glerum et al.</u> by the teaching of <u>Marullo et al.</u>, since <u>Marullo et al.</u> teaches that "by providing for the aforementioned automated client-based web universal resource (link) extraction tool, such automation avoids the inadequacies associated with user testing and intervention wherein manual users might otherwise be required to request pages, view document source, and document all of the links (assuming they were found without error) associated with the HTML pages. The getlinks subsystem accordingly automatically finds all links on each page, and moreover formats the output data for use by the other test tools" (see 14:32-43).

Art Unit: 2164

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified <u>Glerum et al.</u> by the teaching of <u>Dutta et al.</u>, since <u>Dutta et al.</u> teaches that "In addition to testing the web site on the various browsers to determine the effectiveness of each browser, it is also desirable to have a technique that can compare each browser's execution of the web site to a set of criteria established by the web designed" (see 3:15-20).

It would also have been obvious to have further modified <u>Glerum et al.</u> by the teachings of <u>Miller et al.</u>, as <u>Miller et al.</u> is also related to testing browser software to determine its usability and whether or not it can correctly render webpages. In addition to this, <u>Miller et al.</u> teaches "broadly speaking, the invention relates to improved approaches for testing websites. According to one aspect of the invention website testing is performed in a browser environment. As such, information for testing can be obtained from a browser that is able to perform automated analysis and testing of websites" (see paragraph [0010]).

As to claim 21, <u>Glerum et al.</u> teaches a program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform a method for testing a browser software in a computer environment (see Abstract and 1:38-57), the method comprising the steps of:

Glerum et al. does not teach generating a list of URLs (Universal Resource Location) using a web crawler;

Application/Control Number: 10/773,068
Art Unit: 2164

Marullo et al. teaches generating a list of URLs (Universal Resource Location) using a web crawler (see 13:62-14:14):

Glerum et al. as modified teaches applying a browser test script (see Marullo et al. 8:22-45), wherein said browser test script automatically instructs a first browser program containing said browser software to load and render web pages according to the list of URLs, wherein said browser test script tests said browser software over a plurality of applications at sites contained within the list of URLs (see Marullo et al. 8:22-45);

Detecting one or more errors in rendering of said first browser program using the web pages (see Glerum et al. 1:38-57 and 4:63-5:3)

Glerum et al. as modified does not teach by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program, wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program;

<u>Dutta et al.</u> teaches by comparing a representation of rendering results of the first browser program to a representation of rendering results of a second browser program (see 7:23-35 and 7:50-65), wherein a representation of rendering results of a browser program comprises an internal representation of a web page as interpreted by the browser program (see <u>Dutta et al.</u> 8:9-11, 8:41-55, and 8:65-9:14)

Glerum et al. as modified does not teach wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the

Art Unit: 2164

objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page

Miller et al. teaches wherein the internal representation includes a list of objects to be displayed for the web page and the attributes of the objects, and wherein the attributes and the objects that are uniquely defined by the web page are compared to ensure that there is no glitch in interpreting the information defining the web page (see paragraphs [0024], [0082]-[0083], and [0088]-[0094]))

Glerum et al. as modified teaches:

and wherein one or more errors are detected when the representation of rendering results of the first browser program does not match the representation of rendering results of the second browser program (see <u>Dutta et al.</u> 8:9-11, 8:41-55, and 8:65-9:14 and Miller et al. paragraph [00241])

Automatically storing information about said one or more errors (see <u>Glerum et al.</u> 4:63-5:3);

Wherein said step of applying a browser test script is performed while said first browser program is under development and prior to distribution (see <u>Glerum et al</u>. 4:63-5:3 and 8:61-9:3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Glerum et al.</u> by the teaching of <u>Marullo et al.</u>, since <u>Marullo et al.</u> teaches that "by providing for the aforementioned automated client-based web universal resource (link) extraction tool, such automation avoids the

Art Unit: 2164

inadequacies associated with user testing and intervention wherein manual users might otherwise be required to request pages, view document source, and document all of the links (assuming they were found without error) associated with the HTML pages. The getlinks subsystem accordingly automatically finds all links on each page, and moreover formats the output data for use by the other test tools\* (see 14:32-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified <u>Glerum et al.</u> by the teaching of <u>Dutta et al.</u>, since <u>Dutta et al.</u> teaches that "In addition to testing the web site on the various browsers to determine the effectiveness of each browser, it is also desirable to have a technique that can compare each browser's execution of the web site to a set of criteria established by the web designed" (see 3:15-20).

It would also have been obvious to have further modified Glerum et al. by the teachings of Miller et al., as Miller et al. is also related to testing browser software to determine its usability and whether or not it can correctly render webpages. In addition to this, Miller et al. teaches "broadly speaking, the invention relates to improved approaches for testing websites. According to one aspect of the invention website testing is performed in a browser environment. As such, information for testing can be obtained from a browser that is able to perform automated analysis and testing of websites" (see paragraph [0010]).

Art Unit: 2164

As to claims 2, 12, and 22, <u>Glerum et al</u>. as modified teaches wherein the one or more errors include a crash of the first browser program in rendering one of the web pages (see 1:38-57).

As to claims, 3, 13, and 23, <u>Glerum et al</u>. as modified teaches the claim upon which this claim is dependent.

Glerum et al. as modified teaches said browser test script automatically instructs said second browser program load and render the web pages (see <u>Dutta et al.</u> 7:23-35 and <u>Marullo et al.</u> 8:22-45);

Claims 7, 17, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Glerum et al</u>. (US Patent 6,6529,267) in view of <u>Marullo et al</u>. (US Patent 6,185,701), in view of <u>Dutta et al</u>. (US Patent 6,918,066), in view of <u>Miller et al</u>. (US Pre-Grant Publication 2007/0234217), and further in view of <u>Castro</u> ("HTML FOR THE WORLD WIDE WEB").

Glerum et al. as modified teaches the claims upon which these claims are dependent.

Glerum et al. does not explicitly teach wherein the internal representation of the web page comprises attributes of the web page, including:

A background color;

A number of columns of a table; and

A number of rows of a table.

Art Unit: 2164

<u>Castro</u> teaches wherein the internal representation of the web page comprises attributes of the web page, including:

A background color (see page 228);

A number of columns of a table (see pages 228 and 233. A number of columns are shown in the HTML code); and

A number of rows of a table (see pages 228 and 233. A number of rows are shown in the HTML code).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Glerum et al.</u> to have included the teaching of <u>Castro</u> to interpret common HTML code when rendering the web page, since interpreting a web page and rendering the web page based on the tags found within it was well known to anyone of ordinary skill in the art at the time the invention was made. It would have been an obvious test as to how well a browser worked by determining whether or not the browser could render 'table' and 'background color' HTML tags.

7. Claims 8, 18, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glerum et al. (US Patent 6,6529,267) in view of Marullo et al. (US Patent 6,185,701), in view of Dutta et al. (US Patent 6,918,066), in view of Miller et al. (US Pre-Grant Publication 2007/0234217), and further in view of Shindo (US Patent 6,865,592).

Glerum et al. as modified teaches the claim upon which these claims depend.

Art Unit: 2164

Glerum et al. as modified does not teach automatically restarting the first browser program after a crash of the first browser program in rendering one of the web pages.

<u>Shindo</u> teaches automatically restarting the first browser program after a crash of the first browser program in rendering one of the web pages (see <u>Shindo</u> 11:15-23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Glerum et al. by the teaching of Shindo, since Shindo teaches that "if a failure occurs due to the Web environment on the automatic transaction apparatus side, such as halting of the Web browser, or if a failure occurs due to the Web environment on the Web server side, such as shut-down of the server or congestion on the network, the automatic transaction apparatus cannot download applications required to operate. Therefore the automatic transaction apparatus halts the process. If the automatic transaction apparatus stops, customers cannot be serviced" (see 1:31-39).

Claim 9-10, 19-20, and 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Glerum et al.</u> (US Patent 6,6529,267)in view of <u>Marullo et al.</u> (US Patent 6,185,701), in view of <u>Dutta et al.</u> (US Patent 6,918,066), in view of <u>Miller et al.</u> (US Pre-Grant Publication 2007/0234217), and further in view of <u>Garcia-Chiesa</u> (US Pre-Grant Publication 2002/0099723).

As to claims 9, 19, and 29, Glerum et al. as modified teaches the claim upon which these claims depend.

Art Unit: 2164

Glerum et al. as modified teaches does not teach further comprising the step of avoiding duplicated visits to a same URL.

Garcia-Chiesa teaches further comprising the step of avoiding duplicated visits to a same URL (see Garcia-Chiesa paragraph [0010]. "Further, the methods the present invention generate lists of unique URLs that are marked each of them as static, thus the engines do not need to follow ANY non-static link. Plus, the list that follows is deduplicated, optimized and sanitized").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Glerum et al. by the teaching of Garcia-Chiesa, since Garcia-Chiesa teaches that "Further more the techniques include the elimination of possible crawling loops that due to minor differences in the emitted URLs format could otherwise be undetected by crawlers not specifically aware of the non-materiality of these subtle syntactic differences" (see paragraph [0043]).

As to claim 10, 20, and 30, <u>Glerum et al</u>. as modified teaches the claims upon which these claims are dependent.

Glerum et al. does not teach wherein a number of URLs are removed from the URLs reported by the web crawler to generate the list of URLs (see <u>Garcia-Chiesa</u> paragraph [0010]. Removing duplicates will remove URLs from the list).

Garcia-Chiesa teaches wherein a number of URLs are removed from the URLs reported by the web crawler to generate the list of URLs (see <u>Garcia-Chiesa</u> paragraph [0010]. Removing duplicates will remove URLs from the list).

Application/Control Number: 10/773,068 Page 18

Art Unit: 2164

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified <u>Glerum et al.</u> by the teaching of <u>Garcia-Chiesa</u>, since <u>Garcia-Chiesa</u> teaches that "Further more the techniques include the elimination of possible crawling loops that due to minor differences in the emitted URLs format could otherwise be undetected by crawlers not specifically aware of the non-materiality of these subtle syntactic differences" (see paragraph [0043]).

#### Response to Arguments

 Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are moot in view of the new ground(s) of rejection.

In regards to claims 7, 17, and 27, Applicant argues that "Castro has nothing to do with an internal representation of a web page. Rather Castro is describing web page attributes as they are found in the source code for the page". In response to this argument, it is noted newly cited reference Miller et al. teaches an internal representation that allows a user to highlight objects in a webpage. The objects, along with their attributes, are then recorded. As the objects are generated from the HTML of a webpage, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included allowing the HTML examples of Castro to be selected and tested for proper output.

#### Conclusion

Application/Control Number: 10/773,068
Art Unit: 2164

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES D. ADAMS whose telephone number is (571)272-3938. The examiner can normally be reached on 8:30 AM - 5:00 PM, M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. D. A./ Examiner, Art Unit 2164

/Charles Rones/ Supervisory Patent Examiner, Art Unit 2164